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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,858	10/16/2003	Fumio Ohtomo	A36044	1724
21003	7590	10/20/2005	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			ALSOMIRI, ISAM A	
			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/686,858	Applicant(s) OHTOMO ET AL.	
	Examiner Isam Alsomiri	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frucht US006188319B1 in view of Guggenguehl CH 676042 A5.

Referring to claim 9, Frucht discloses in figure 1 a position measuring instrument that irradiates a reflector (object, intruder) with measuring light to determine a distance on the basis of reflected light comprising a rotating unit 22 and a fixed unit [30, 12, 31, 32, 14], said rotating unit irradiating horizontally a light receiving means of said fixed unit; a rotating mirror 22 for guiding the reflected light to said fixed unit; and an angle detector for detecting a position of the rotating mirror; wherein said fixed unit emits a measuring light and measures the distance from the reflected light, and wherein the light receiving means receives the reflected light through said rotating mirror and emits the detected light (see abstract, col. 2 line 10 – col. 3 line 14). Frucht is silent about the fixed unit emitting a measuring light in a fan-shape. Guggenguehl teaches emitting in a fan-shape (see Abstract). It would have been obvious to modify Frucht to emit light in a fan-shape to cover a wider area.

Referring to claims 10 and 11, Frucht teaches the direction of the reflector is obtained from a rotating position of an angle of detection at the reflective light is received, and the measured distance (see Abstract, col. 5 lines 13-41). Frucht is silent about using a collimation center. Guggenguehl teaches the measuring light includes collimation light; said light receiving unit has a collimation-use light receiving sensor for receiving the collimation light; and said collimation-use light receiving sensor detects a collimation center and a deviation of the reflector by the reflected light (see col. 2 line 14 – col. 6 line 58). It would have been obvious to modify Frucht to include the collimation center for better detection of the signals. Furthermore, a plurality of reflectors (targets) can be detected.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frucht US006188319B1 in view of Guggenguehl CH 676042 A5. and Aeschlimann US 4,681,433.

Frucht and Guggenguehl are silent about the claimed “a sending set sends a referenced data to an individual reflector, and based on a plurality of detection, transmit measurement data referenced to a reflected reflector”. However, transmitting data back to a reflector (for example a cooperative target, or a station) is well known. Aeschlimann teaches a device to measure a relative position of a target, and transmitting the detected data to the target (see col. 3 line 34 – col. 5 line 8, figure 4). It would have been obvious to modify Frucht to include transmitting data back to a reflector such as a cooperative target or a station for quick measurement.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frucht US006188319B1 in view of Guggenguehl CH 676042 A5. and Sasaki et al. US006137569A.

Frucht and Guggenguehl are silent about the light receiving unit forms a camera tube, and image data captured by the camera tube is revised based on the difference between image data emitted, reversed detected light, and image data without detecting image data. However, Sasaki teaches the claimed camera tube including the revised step (see Abstract, figures 2A-2C). It would have been obvious to modify Frucht to include the camera tube and the revising step for better and more accurate detection of a scene.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited to Laskowski shows a Range finder including scanning system and a fixed emitting and receiving units.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



October 16, 2005



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600